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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,588	10/23/2001	Michael Kenneth Brown	401052-A-01-US(Brown)	6479

7590   06/19/2003

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EXAMINER
PHAN, JOSEPH T

ART UNIT	PAPER NUMBER
2645	8

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2001* .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claim Objections

1.   Claim 17 objected to because of the following informalities:

Claim 17, lines 10-11 recites "...for a second type of classification automatic

speech recognition unit" which is grammatically incorrect and unclear. It appears that

the words "by the" has been left out after "classification" which will be read as such.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless – 6, 8, 12, 14, 22, 24, and 31

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-5, 7, 9-11, 13, 15-21, 23, and 25-30 rejected under 35 U.S.C. 102(b)

as being anticipated by Meyers, Patent #6,041,116.

Regarding claims 1, 11, and 17 Meyers teaches a method for doing call

classification on a call to a destination endpoint, comprising the steps of:

receiving audio information from the destination endpoint (col.4 lines 57-63);

detecting speech or tones in received audio information analyzing using automatic

speech recognition the received audio information for words in response to the

detection of speech(col.4 line 57-col.5 line 45; voice and answering machine message);

and analyzing using automatic speech recognition the received audio information for

tones in response to the detection of tones (col.4 line 57-67col.5 line 6; tones); and

determining a call classification for the destination endpoint in response to the analysis

of words or the analysis of tones (col.4 line 57-col.5 line 45).

Regarding claims 2 and 18, Meyers teaches the method of claims 1 and 17

wherein the analysis for the first type of classification is analyzing the audio information

for words (col.4 line 57-col.5 line 45; voice and answering machine messages);

Regarding claim 3 and 19, Meyers teaches the method of claims 2 and 18

wherein the analyzed words are formed as phrases (col.4 line 57-col.5 line 45; voice

and answering machine phrases);

Regarding claims 4 and 20 Meyers teaches the method of claims 2 and 18

wherein the analysis for the second type of classification is analyzing the audio

information for tones (col.4 line 57-67col.5 line 6; tones);

Regarding claims 5 and 21 Meyers teaches the method of claims 4 and 18

wherein the step of receiving audio information further comprises detecting speech or

tones in the audio information (col.4 line 57-col.5 line 45)

Regarding claims 7, 13, and 23, Meyers teaches the methods of claims 6, 12,

and 22 wherein the step of executing comprises the step of using a grammar for speech

(col.5 lines 1-18; algorithms for detecting voice/speech is a form of grammar).

Regarding claims 9, 15, and 25, Meyers teaches the method of claims 8, 14, and 24 wherein the step of executing comprises the step of using a grammar for tones*(col.5 lines 1-18; algorithms for detecting tones is a form of grammar).*

Regarding claims 10, 16, and 26, Meyers teaches the method of claims 8, 14, and 24 wherein the step of determining comprises the step of executing an inference engine (col.5 lines 1-18).

Regarding claim 27, Meyers teaches a call classifier for determining the call classification of a called destination endpoint, comprising:

an automatic speech recognizer for detecting first characteristics in audio information received from the called destination endpoint (col.4 line 57-col.5 line 45);

the automatic speech recognizer further detecting second characteristics in the audio information received from the called destination endpoint; and inference engine for classifying the call in response to the automatic speech recognizer (col.4 line 57-col.5 line 45).

Regarding claim 28, Meyers teaches the call classifier of claim 27 wherein the first characteristics are words (col.5 lines 1-45).

Regarding claim 29, Meyers teaches the call classifier of claim 28 wherein the words are formed into phrases (col.5 lines 1-45).

Regarding claim 30, Meyers teaches the call classifier of claim 28 wherein the second characteristics are tones (col.5 lines 1-18).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 6, 8, 12, 14, 22, 24, and 31 rejected under 35 U.S.C. 103(a) as being

unpatentable over Meyers in view of Trandal et al., Patent #6088428.

Regarding claims 6, 8, 12, 14, 22, 24, and 31, Meyers teaches the methods and

call classifer of claims 5-6, 11-12, 21-22, and 30 wherein the step of analyzing for the

first and second types of classification is responsive to the detection of speech and/or

tone in the audio information.

Meyers is silent on executing a Hidden Markov Model to determine the presence

of words or tones in the audio information.

Trandal discloses using a Hidden Markov Model to determine the presence of

words and/or tones in audio information (col.8 lines 16-25 and col.23 lines 17-28)

At the time the invention was made, it would have been obvious to a person of

ordinary skill in the to use the Hidden Markov Model as in Trandal for the algorithms

disclosed in Meyer(col.5 lines 1-45) to determining the presence of words and/or tones

in audio information.

One of ordinary skill in the art would have been motivated to do this as Meyers is

silent on using a Hidden Markov Model as algorithms for detecting the presence of

words and tones but discloses using a DSP to execute the algorithm in which Trandal

also discloses using a DSP to execute a Hidden Markov Model which are well-known

algorithms for detection of words and tones.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph T Phan whose telephone number is 703-305-

3206. The examiner can normally be reached on M-TH 8:30-6:30, in every other

Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Fan Tsang can be reached on 703-305-4895. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-872-9314 for

regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

9600.

JTP
June 12, 2003

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600